

From: [Steve Rotherth](#)
To: [Cross, Craig](#)
Cc: [Elizabeth Soderstrom](#)
Subject: American Rivers Public Comments
Date: Wednesday, October 05, 2011 5:41:37 PM

Dear Mr. Craig Cross:

On behalf of American Rivers and our partners, we would like to thank Department of Water Resources for providing the opportunity to apply for funding for the Proposition IE Stormwater Flood Management Program. We were excited to see that our proposal entitled: Stormwater Source Control in the CABY Region was ranked 18 out of 41 during the review period, but were disappointed to note that it was just below the funding line. We are hoping that you will reconsider this initial decision for several reasons, outlined below:

- * There is only one other project slated to be funded through this program in the 400 mile long Sierra Nevada (the Fannon Lake Restoration and Improvement Project) and not one that directly addresses stormwater flood management. Given that the Sierra snowpack supplies 65% of the water for the entire state, developing stormwater management practices in this region in the face of climate change is critical.

- * The proposed cost-effective project would be an important demonstration of how to capture and treat stormwater on site. In addition, the project is highly visible as it is based in two public locations – the Nevada County office buildings and library, and at a Charter Waldorf School.

- * Further, this project is based in two financially disadvantaged rural communities – Nevada City and Grass Valley. Such innovative and important work is critical to not only building our communities, but also providing employment opportunities.

- * Although the majority of the comments provided in the Proposal Evaluation were positive, there were several that raised issues with the proposal. Below, we address those issues. Based on our responses to these comments, we believe that the ranking of our proposed project should increase 2 points from 18 to 16.

Thank you so much for your consideration, and please feel free to contact us if you have any further questions -

Steve Rotherth, California Regional Director
American Rivers
530 478-5672

American Rivers Response to Review Questions

Comment 1: Reviewers are concerned that the project has the potential to contaminate groundwater. Potential impacts to groundwater are not adequately identified and/or evaluated by the applicant in any feasibility or technical study.

Response: The Stormwater BMP's proposed in this project are part of the CSWRCB's Ten LID (Low Impact Development) Practices: (http://www.swrcb.ca.gov/water_issues/programs/low_impact_development/index.shtml). The practices (raingardens, pervious pavement, and a bioswale) are standard, well tested and promoted by the water board as protecting surface water and ground water under the conditions where they are proposed. In addition, Phase 1 of this project (at the Rood Administration Center) was funded by the State Water Resources Control Board and has been permitted, constructed and monitored for one year under a CSWRCB-approved QAPP (the monitoring report is available upon request) and no deleterious impact to groundwater was found, except an increase in the groundwater table.

Comment 2: Tasks in the Proposal have detailed cost information, but not all costs are fully supported due to a lack of documentation of how costs were derived. The Budget section provides a summary Budget chart, followed by a detailed Budget summary that includes number of hours, cost per hour, and job classification for each Task. For the construction component, the detailed Budget chart references

chart 6a. The construction cost estimate total was \$395,000 but the summary Budget table has \$495,000. It is unclear why the two amounts are not consistent. Chart 6a includes estimates in relation to the construction activities such as "Excavation and earthwork, or Piping." These estimates are lump sums and include no documentation or explanation on how they were derived. The estimates don't include information such as cost per hour, number of hours, or job classification. Also, funding match for the Project is listed in lump sum without supporting information to substantiate how the costs were determined. Task 6 in the detailed Budget chart lists funding match as \$5,000, while in the "Sources of funding" Section, Task 6 funding match is listed as \$10,000. Task 9 funding match also does not match the detailed Budget chart and the "Sources of funding" Section.

Response: The construction costs are based upon two things:

1. The final budget and invoices for Phase I of the project (described in detail in the Status section of the Work Plan), which constructed and installed stormwater facilities that are the same as those proposed, and
2. The budget estimate provided by the architect and restoration design group (both partners in the project, as described in the Work Plan).

Funding match amounts were taken from existing ARRA budgets and are distributed to correspond with the existing grant funds, as well as American Rivers' internal budget processes.

Comment 3: Monitoring, Assessment, and Performance Measures. The criterion is fully addressed but is not supported by thorough documentation or sufficient rationale. The output and outcome indicators seem appropriate for the given Project Goals. The goals appear to be feasible within the life of the Proposal. Some of the goals are dependent on storm events; however, the proposal has mentioned that replication of a storm event is also possible to test the effectiveness of the project. Project Goal 2 states "Protect water quality through the capture and infiltration of 100 percent of runoff in approximately 90 percent of storm events" yet, the outcome indicator applies only to surface water and did not address groundwater quality.

Response: As mentioned above, other similar projects have not seen a negative impact to groundwater water quality. The features proposed are accepted BMP's and are promoted by the CSWRCB as protecting both surface and groundwater quality (see discussion above). Based on this experience, we do not expect a negative impact to groundwater quality. We could, however, add this dimension to the outcome indicators and to our monitoring protocol.

Comment 4: Average levels of FDR and water supply benefits can be realized through this proposal, however, supporting documentation is partially unsubstantiated. FDR benefits are described but not well quantified. FDR would presumably occur along the Yuba River, though location of the avoided damage is not specified. An estimate is provided of the reduction in stormwater leaving the treated sites annually, but the source of the estimate is unclear. It is unclear how such a small project would measurably affect storm flow and damage in the Yuba River. Water supply benefits are described in general terms as resulting from the capture and percolation of stormwater.

Response: Phase 1 of this project constructed and monitored LID features at the Rood Administrative Center under a CSWRCB-approved QAPP. We expect performance of the proposed work to be similar. In summary, during the winter of 2011, Phase 1 reduced suspended sediment by an estimated 156 kg and turbidity by over 59%. Pollutant load reductions ranged from 62% to 100%; analytes included 5 metals, nitrate and phosphorous. One highlight was reduction of total lead influent concentrations from 18µg/L to below detection limits as compared with a regulatory action level of 15 µg/L. A full monitoring report is available upon request.

Comment 5: The Proposal includes projects that implement the following Program Preferences: Include Regional Projects and Programs; Practice Integrated Flood Management; and Expand Environmental Stewardship. However, the Proposal demonstrates a limited degree of certainty that the Program Preferences claimed can be achieved, and lacks thorough documentation for the breadth and magnitude of the Program Preferences to be implemented.

Response: This project would be the first LID project in the CABY IRWMP region. The Economic analysis calculates the effect of numerous small projects, such as this one because, as a demonstration project, one goal of the proposal is widespread adoption of LID techniques. Stormwater reduction at the treated sites was calculated as follows: 60 inches of rainfall per year falling on 55,000 square feet of

impervious cover = 275,000 cubic feet of water, or over 2 million gallons annually that will flow into LID features.